AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-17 (canceled)

18. (previously presented): An iron sulfide mixture comprising an iron sulfide selected from the group consisting of (a), (b), (c) and (d) below and at least one alkaline earth metal compound:

(a) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM_xN_yS_z$ wherein M represents an alkaline earth metal, N represents an alkali metal, and x, y, and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component;

(b) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM'_xN_yS_z$ wherein M' represents Ca, Mg or combination thereof, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component;

(c) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM_xN_yS_z$ wherein M represents an alkaline earth metal, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component, wherein the mackinawite structure is a denatured mackinawite structure which gives an XRD pattern wherein

spacing between 001 planes has increased in c axis direction to a value of from 5.03 A to 5.53 A and the ratio of the intensity for the diffraction peak attributable to any other hkl planes to that for the diffraction peak attributable to the 001 planes is 20/100 or lower; and

(d) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM'_xN_yS_z$ wherein M' represents Ca, Mg or combination thereof, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component; wherein the mackinawite structure is a denatured mackinawite structure which gives an XRD pattern wherein spacing between 001 planes has increased in c axis direction to a value of from 5.03 A to 5.53 A and the ratio of the intensity for the diffraction peak attributable to any other hkl planes to that for the diffraction peak attributable to the 001 planes is 20/100 or lower.

19. (previously presented): The iron sulfide mixture as claimed in claim 18, wherein the alkaline earth metal compound is at least one compound selected from the group consisting of hydroxides, carboxylates, phosphates and sulfites of alkaline earth metals.

20. (previously presented): A heavy metal treating agent comprising an iron sulfide composition comprising an iron sulfide selected from the group consisting of (a), (b), (c) and (d) below as an effective component:

(a) an iron sulfide with excellent durability having mackinawite structure which contains $FeM_xN_yS_z$ wherein M represents an alkaline earth metal, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component;

(b) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM'_xN_yS_z$ wherein M' represents Ca, Mg or combination thereof, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component;

(c) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM_xN_yS_z$ wherein M represents an alkaline earth metal, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component, wherein the mackinawite structure is a denatured mackinawite structure which gives an XRD pattern wherein spacing between 001 planes has increased in c axis direction to a value of from 5.03 A to 5.53 A and the ratio of the intensity for the diffraction peak attributable to any other hkl planes to that for the diffraction peak attributable to the 001 planes is 20/100 or lower; and

(d) an iron sulfide with excellent durability having a mackinawite structure which contains $FeM'_xN_yS_z$ wherein M' represents Ca, Mg or combination thereof, N represents an alkali metal, and x, y and z, indicating the molar proportions of the respective elements, represent numbers satisfying $0.01<x\leq0.5$, $y\leq0.2$ and $0.7\leq z\leq1.4$, as an essential component; wherein the mackinawite structure is a denatured mackinawite structure which gives an XRD pattern wherein spacing between 001 planes has increased in c axis direction to a value of from 5.03 A to 5.53 A and the ratio of the intensity for the diffraction peak attributable to any other hkl planes to that for the diffraction peak attributable to the 001 planes is 20/100 or lower.

21. (previously presented): A heavy metal treating agent comprising the mixture of claim 18.

22. (previously presented): A heavy metal treating agent comprising the mixture of claim 19.

23. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 20 to a refuse incineration ash, fly ash or fused fly ash each containing at least one heavy metal, and kneading the resulting mixture.

24. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 21 to a refuse incineration ash, fly ash or fused fly ash each containing at least one heavy metal, and kneading the resulting mixture.

25. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 22 to a refuse incineration ash, fly ash or fused fly ash each containing at least one heavy metal, and kneading the resulting mixture.

26. (previously presented): The method as claimed in claim 23, wherein after adding the heavy metal treating agent, water is added to the mixture.

27. (previously presented): The method as claimed in claim 24, wherein after adding the heavy metal treating agent, water is added to the mixture.

28. (previously presented): The method as claimed in claim 25, wherein after adding the heavy metal treating agent, water is added to the mixture.

29. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 20 to a soil containing at least one heavy metal, and kneading the resulting mixture.

30. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 21 to a soil containing at least one heavy metal, and kneading the resulting mixture.

31. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 22 to a soil containing at least one heavy metal, and kneading the resulting mixture.

32. (previously presented): The method as claimed in claim 29, wherein after adding the heavy metal treating agent, water is added to the mixture.

33. (previously presented): The method as claimed in claim 30, wherein after adding the heavy metal treating agent, water is added to the mixture.

34. (previously presented): The method as claimed in claim 31, wherein after adding the heavy metal treating agent, water is added to the mixture.

35. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 20 to a waste water containing at least one heavy metal, and stirring the resulting mixture.

36. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 21 to a waste water containing at least one heavy metal, and stirring the resulting mixture.

37. (previously presented): A method for treating heavy metals which comprises adding the heavy metal treating agent of claim 22 to a waste water containing at least one heavy metal, and stirring the resulting mixture.

38. (previously presented): The method as claimed in claim 23, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

39. (previously presented): The method as claimed in claim 24, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

40. (previously presented): The method as claimed in claim 25, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

41. (previously presented): The method as claimed in claim 26, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

42. (previously presented): The method as claimed in claim 27, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

43. (previously presented): The method as claimed in claim 28, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

44. (previously presented): The method as claimed in claim 29, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

45. (currently amended): The method as claimed in claim 30, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd~~C~~, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

46. (previously presented): The method as claimed in claim 31, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

47. (previously presented): The method as claimed in claim 32, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

48. (previously presented): The method as claimed in claim 33, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

49. (previously presented): The method as claimed in claim 34, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

50. (previously presented): The method as claimed in claim 35, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hb, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

51. (previously presented): The method as claimed in claim 36, wherein the heavy metal is at least one element selected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.

52. (previously presented): The method as claimed in claim 37, wherein the heavy metal is at least one element elected from the group consisting of Pb, Cd, Hg, Zn, Cu, Ni, Cr, As, Se, Sb and Mo.